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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/521,413

**Applicant(s)**

ENGEL ET AL.

**Examiner**

CHARLES HICKS

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 July 2009.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-65 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 25-65 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 14 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-85/86)  
Paper No(s)/Mail Date 06/11/2009, 10/02/2009  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This communication is in response to amendments filed 07/29/2009. Claims 1-24 are cancelled. Claims 25-65 are new. Currently claims 25-65 are pending.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 52-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Witehira (US 6,906,762).

In reference to claim 52, Witehira teaches a multi-component display (Witehira, Abstract, multi-levels of screens),

comprising: a first display screen comprising a first plurality of pixels, wherein said first display screen is operable to display a first image using said first plurality of pixels, and wherein said first display screen utilizes a first display technology (Witehira, Fig. 4, color display screen 1);

a second display screen comprising a second plurality of pixels, wherein said second display screen is operable to display a second image using said second plurality of pixels, wherein said second display screen overlaps said first display screen, and wherein said second display screen utilizes a second display technology (Witehira, Fig. 4, color display screen 3).

Claim 53 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira teaches wherein said first plurality of pixels are arranged in a first tessellated pixel pattern, and wherein said second plurality of pixels are arranged in a second tessellated pixel pattern (Witehira, Fig. 4).

Claim 54 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira teaches wherein said first plurality of pixels are arranged in a first pattern, and wherein said second plurality of pixels are arranged in a second pattern (Witehira, Fig. 4).

Claims 55 and 56 are rejected as being dependent on rejected claim 52 as discussed above and further, Witehira teaches wherein said first display technology, and second display technology, are selected from a group consisting of a liquid crystal display, a light emitting diode display, an organic diode display and a projection display device (Witehira, col. 2, ll. 14-19).

Claim 57 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira teaches further comprising: at least one interstitial layer disposed between said first and second display screens (Witehira, Fig. 4, item 13).

Claim 58 is rejected as being dependent on rejected claim 57 as discussed above and further, Witehira teaches wherein said at least one interstitial layer comprises a diffuser (Witehira, Fig. 4, item 13).

Claim 59 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira teaches further comprising: a component operable to generate light to illuminate said first image and said second image (Witehira, col. 4, ll. 50-56).

Claim 60 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira teaches wherein a first pixel of said plurality of pixels has a first shape, and wherein a second pixel of said second plurality of pixels has a second shape (Witehira, Fig. 4).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 25-33, 62 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762).

In reference to claim 25, Witehira teaches a multi-component display (Witehira, Abstract, multi-levels of screens),

comprising: a first display screen comprising a first plurality of pixels, wherein said first display screen is operable to display a first image using said first plurality of pixels, arranged in a first pattern (Witehira, Fig. 4, color display screen 1);

and a second display screen comprising a second plurality of pixels, wherein said second display screen is operable to display a second image using said second plurality of pixels, wherein said second display screen overlaps said first display screen, and said second pixels are arranged in a second pattern (Witehira, Fig. 4, color display screen 3).

Witehira does not disclose expressly said first plurality of pixels comprises a first plurality of sub-pixels, and wherein said second plurality of pixels comprises a second plurality of sub-pixels. However, examiner takes Official Notice that color pixels containing sub-pixels are old and well-known in the art. Accordingly, it would have been obvious to one having ordinary skill in the art to modify Witehira such that the color pixels comprise a plurality of sub-pixels. As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to reduce interference in a multi-layer display.

Claim 26 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira teaches wherein said first plurality of pixels are arranged in a first tessellated pixel pattern, and wherein said second plurality of pixels are arranged in a second tessellated pixel pattern (Witehira, Fig. 4).

Claim 27 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira teaches wherein said first plurality of pixels are arranged in

a third pattern, and wherein said second plurality of pixels are arranged in a fourth pattern (Witehira, col. 5, ll. 14-16).

Claims 28 and 29 are rejected as being dependent on rejected claim 25 as discussed above and further, Witehira teaches wherein said first display screen, and second display screen are selected from a group consisting of a liquid crystal display, a light emitting diode display, an organic light emitting diode display and a projection display device (Witehira, col. 2, ll. 14-19).

Claim 30 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira teaches further comprising: at least one interstitial layer disposed between said first and second display screens (Witehira, Fig. 4, item 13).

Claim 31 is rejected as being dependent on rejected claim 30 as discussed above and further, Witehira teaches wherein said at least one interstitial layer comprises a diffuser (Witehira, Fig. 4, item 13).

Claim 32 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira teaches further comprising: a component operable to generate light to illuminate said first image and said second image (Witehira, col. 4, ll. 50-56).



Claim 33 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira teaches wherein a first pixel of said plurality of pixels has a first shape, and wherein a second pixel of said second plurality of pixels has a second shape (Witehira, Fig. 4).

Claim 62 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira teaches a plurality of first color pixels, and plurality of second color pixels (Witehira, Fig. 4; col. 5, ll. 59-63, color pixels). Witehira does not disclose expressly wherein said first plurality of pixels comprises a first plurality of sub-pixels, and wherein said second plurality of pixels comprises a second plurality of sub-pixels. However, examiner takes Official Notice that color pixels containing sub-pixels are old and well-known in the art. Accordingly, it would have been obvious to one having ordinary skill in the art to modify Witehira such that said first plurality of pixels comprises a first plurality of sub-pixels, and wherein said second plurality of pixels comprises a second plurality of sub-pixels. As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to reduce interference in a multi-layer display.

Claim 63 is rejected as being dependent on rejected claim 62 as discussed above and further, Witehira teaches wherein a first pixel of said first plurality of pixels has a first shape, and wherein a second pixel of said second plurality of pixels has a second shape (Witehira, Fig. 4; col. 5, ll. 59-63, color pixels).

Witehira does not disclose expressly said first plurality of pixels comprises a first plurality of sub-pixels, and wherein said second plurality of pixels comprises a second plurality of sub-pixels. However, examiner takes Official Notice that color pixels containing sub-pixels are old and well-known in the art. Accordingly, it would have been obvious to one having ordinary skill in the art to modify Witehira such that the plurality of color pixels having a first and second shape comprise a plurality of sub-pixels. As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to reduce interference in a multi-layer display.

Claims 34-36, 61, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762) in view of Liang et al. (US 7,072,095).

Claim 34 is rejected as being dependent on rejected claim 25 as discussed above and further Witehira however fails to teach wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature.

Liang discloses pixel shapes, analogous in art with that of Witehira, wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the pixel shapes of Witehira wherein a first pixel of

said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claim 35 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira however fails to teach wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape.

Liang discloses sub-pixel shapes, analogous in art with that of Witehira, wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the sub-pixel shapes of Witehira wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claim 36 is rejected as being dependent on rejected claim 25 as discussed above and further, Witehira however fails to teach wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature.

Liang discloses sub-pixel shapes, analogous in art with that of Witehira, wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the sub-pixel shapes of Witehira wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claim 61 is rejected as being dependent on rejected claim 52 as discussed above and further, Witehira however fails to teach wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature.

Liang discloses pixel shapes, analogous in art with that of Witehira, wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the pixel shapes of Witehira wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claim 64 is rejected as being dependent on rejected claim 62 as discussed above and further, Witehira however fails to teach wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature.

Liang discloses sub-pixel shapes, analogous in art with that of Witehira, wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the sub-pixel shapes of Witehira wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claims 37-46, 48, 49, 51, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762) in view of Jiang et al. (US 6,573,961).

Claim 37 is rejected as being dependent on rejected claim 25 as discussed above, and further, Witehira however fails to teach wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern.

Jiang discloses display pixels, analogous in art with that of Witehira wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern (Jiang, Fig. 1A; col. 3, ll. 25-29).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the display pixels of Witehira wherein said first

plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern, as taught by Jiang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to improve the light transmission efficiency and output brightness of a display panel (Jiang, col. 3, ll. 34-39).

In reference to claim 38, Witehira teaches a multi-component display (Witehira, Abstract, multi-levels of screens),

comprising: a first display screen comprising a first plurality of pixels, wherein said first display screen is operable to display a first image using said first plurality of pixels (Witehira, Fig. 4, color display screen 1),

a second display screen comprising a second plurality of pixels, wherein said second display screen is operable to display a second image using said second plurality of pixels (Witehira, Fig. 4, color display screen 3),

wherein said second display screen overlaps said first display screen (Witehira, Fig. 4).

Witehira however fails to teach wherein said first display screen further comprises a first black matrix with a first pattern; and wherein said second display screen further comprises a second black matrix with a second pattern.

Jiang discloses a display, analogous in art with that of Witehira, wherein said first display screen further comprises a first black matrix with a first pattern; and wherein said

second display screen further comprises a second black matrix with a second pattern (Jiang, Fig. 41, col. 58, ll. 27-45; TFT's arranged in matrix's on substrates).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the display of Witehira wherein said first display screen further comprises a first black matrix with a first pattern; and wherein said second display screen further comprises a second black matrix with a second pattern, as taught by Jiang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been an improvement in color contrast (Jiang, col. 58, ll. 40-44).

Claim 39 is rejected as being dependent on rejected claim 38 as discussed above and further, Witehira modified by Jiang teaches wherein said first plurality of pixels are arranged in a first tessellated pixel pattern, and wherein said second plurality of pixels are arranged in a second tessellated pixel pattern (Witehira, Fig. 4).

Claim 40 is rejected as being dependent on rejected claim 38 as discussed above and further, Witehira modified by Jiang teaches wherein said first plurality of pixels are arranged in a third pattern, and wherein said second plurality of pixels are arranged in a fourth pattern (Witehira, col. 5, ll. 14-16).

Claims 41 and 42 are rejected as being dependent on rejected claim 38 as discussed above and further, Witehira modified by Jiang teaches wherein said first



display screen and second display screen are selected from a group consisting of a liquid crystal display, a light emitting diode display, an organic light emitting diode display and a projection display device (Witehira, col. 2, ll. 14-19).

Claim 43 is rejected as being dependent on rejected claim 38 as discussed above and further Witehira modified by Jiang teaches further comprising: at least one interstitial layer disposed between said first and second display screens (Witehira, Fig. 4, item 13).

Claim 44 is rejected as being dependent on rejected claim 43 as discussed above and further, Witehira modified by Jiang teaches wherein said at least one interstitial layer comprises a diffuser (Witehira, Fig. 4, item 13).

Claim 45 is rejected as being dependent on rejected claim 38 as discussed above and further, Witehira modified by Jiang teaches further comprising: a component operable to generate light to illuminate said first image and said second image (Witehira, col. 4, ll. 50-56).

Claim 46 is rejected as being dependent on rejected claim 38 as discussed above and further, Witehira teaches wherein a first pixel of said plurality of pixels has a first shape, and wherein a second pixel of said second plurality of pixels has a second shape (Witehira, Fig. 4).

Claim 48 is rejected as being dependent on rejected claim 38 as discussed above and further, Witehira modified by Jiang, teaches a first plurality of pixels, and a second plurality of pixels (Witehira, Fig. 4; col. 5, ll. 59-63, color pixels).

Witehira does not disclose expressly said first plurality of pixels comprises a first plurality of sub-pixels, and wherein said second plurality of pixels comprises a second plurality of sub-pixels. However, examiner takes Official Notice that color pixels containing sub-pixels is old and well-known in the art. Accordingly, it would have been obvious to one having ordinary skill in the art to modify Witehira as modified by Jiang such that the color pixels comprise a plurality of sub-pixels. As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to reduce interference in a multi-layer display.

Claim 49 is rejected as being dependent on rejected claim 48 as discussed above and further, Witehira modified by Jiang teaches wherein a first sub-pixel of said first plurality of sub-pixels has a first shape, and wherein a second sub-pixel of said second plurality of sub-pixels has a second shape (Witehira, col. 5, ll. 59-63; it is well known in the art that color pixels can include sub-pixels, each having a shape).

Claim 51 is rejected as being dependent on rejected claim 38 as discussed above and further, Witehira however fails to teach wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said

second plurality of pixels comprises a second plurality of color filters arranged in a second pattern.

Jiang discloses display pixels, analogous in art with that of Witehira wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern (Jiang, Fig. 1A; col. 3, ll. 25-29).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the display pixels of Witehira wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern, as taught by Jiang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to improve the light transmission efficiency and output brightness of a display panel (Jiang, col. 3, ll. 34-39).

Claim 65 is rejected as being dependent on rejected claim 52 as discussed above, and further, Witehira however fails to teach wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern.

Jiang discloses display pixels, analogous in art with that of Witehira wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first

pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern (Jiang, Fig. 1A; col. 3, ll. 25-29).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to modify the display pixels of Witehira wherein said first plurality of pixels comprises a first plurality of color filters arranged in a first pattern, and wherein said second plurality of pixels comprises a second plurality of color filters arranged in a second pattern, as taught by Jiang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to improve the light transmission efficiency and output brightness of a display panel (Jiang, col. 3, ll. 34-39).

Claims 47 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witehira (US 6,906,762) in view of Jiang (US 6,573,961) and further in view of Liang et al. (US 7,072,095).

Claim 47 is rejected as being dependent on rejected claim 38 as discussed above and further Witehira modified by Jiang however fails to teach wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature.

Liang discloses pixel shapes, analogous in art with that of Witehira modified by Jiang, wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the pixel shapes of Witehira modified by Jiang wherein a first pixel of said plurality of pixels has a border with a first curvature, and wherein a second pixel of said second plurality of pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

Claim 50 is rejected as being dependent on rejected claim 48 as discussed above and further, Witehira modified by Jiang however fails to teach wherein a first sub-pixel of said first plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature.

Liang discloses sub-pixel shapes, analogous in art with that of Witehira modified by Jiang, wherein a first sub-pixel of said plurality of sub-pixels has a border with a first curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature (Liang, col. 7, ll. 18-31).

At the time the invention was made it would have been obvious to one having ordinary skill in the art to modify the sub-pixel shapes of Witehira modified by Jiang wherein a first sub-pixel of said plurality of sub-pixels has a border with a first

curvature, and wherein a second sub-pixel of said second plurality of sub-pixels has a border with a second curvature, as taught by Liang.

As one of ordinary skill in the art would appreciate, the suggestion/motivation for doing so would have been to maximize the optical effects of a display (Liang, col. 7, ll. 20-25).

### ***Response to Arguments***

Applicant's arguments filed 07/29/2009 have been fully considered but they are not persuasive.

As to claims 25-37 on page 14 of applicants response, applicants argue that Jiang fails to teach or suggest the combination of elements including "wherein said first plurality of pixels comprises a first plurality of sub-pixels arranged in a pattern" and "wherein said second plurality of pixels comprises a second plurality of sub-pixels arranged in a second pattern" as recited in independent claim 25. Applicant further argues that, in this manner, the sub-pixel pattern of each display screen is different. However, this argument is directed towards unclaimed subject matter. Independent claim 25 contains no limiting language to teach that said second pattern is *different* from the first pattern.

Applicant further argues on page 14 of applicants response that applicant understands Jiang to teach a color filter with two layers laminated together and that, as such, that the laminated, two-layer color filter is not used in multiple display screens as

suggested by the rejection. In the current specification, the disclosure of the invention states that "Accordingly, in a first aspect the invention may broadly be said to consist in a multi layer display device comprising at least two display layers at least in part overlapping in which at least one of said display layers has a dissimilar configuration to the other display layer(s) such that moiré interference is reduced" (current specification, pg. 4, ll. 11-15). There is no limiting language in the claims to teach or suggest non-laminated layers of a display in such a broad interpretation.

Therefore, the prior art of record reads on the current claims.

As to claims 38-65, applicants argue that it was agreed during the Examiner Interview of 06/24/2009 that the cited references of record fail to teach or suggest the combination of elements including "wherein said first display screen further comprises a first black matrix with a first pattern" and "wherein said second display screen further comprises a second black matrix with a second pattern", pending further search by the Examiner. Upon further search by the Examiner, the current specification teaches that "Thin film transistors are tiny switching transistors and capacitors. They are arranged in a matrix on a glass substrate and often referred to as black matrix" (current specification, pg. 2, ll. 12-14). The prior art of record teaches wherein a first and second display screen are layers arranged in a matrix on glass substrates (Jiang, Fig. 41, col. 58, ll. 27-45). Also, independent claim 38 contains no limiting language to teach that a first black matrix pattern is *different* from a second black matrix pattern.

Applicants further argue on page 16 of applicants response that it was also agreed during the Examiner Interview of 07/24/2009 that the cited references of record fail to teach or suggest the combination of elements including "wherein said first display screen utilizes a first display technology" and "wherein said second display screen utilizes a second display technology" as recited in claim 52. However, Examiner noted during the interview that the stated claim language was open to a broad interpretation, and, claim 52 contains no limiting language to teach that the first display technology is *different* from the second display technology. Examiner also suggests that using different display technologies could be considered simple substitution of one known element (a first display technology) for another (a second, different display technology) to obtain predictable results (a multi-layer display).

Therefore, the prior art of record reads on the claims.

### ***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES HICKS whose telephone number is 571-270-7535. The examiner can normally be reached on Monday-Thursday from 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz, can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sumati Lefkowitz/  
Supervisory Patent Examiner, Art Unit 2629